Support-Vector Machine

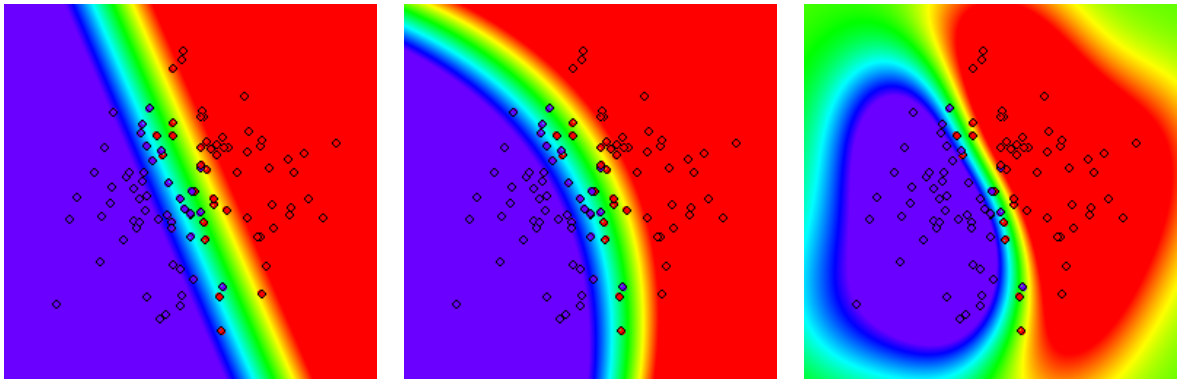
Problem

For each dataset find the best kernel for it. You can use any metric you want.
Also for each two-dimensional dataset and kernel, draw how the SVM classifier classifies the entire space (see Example).
Use this datasets to test your algorithm.

File Format

There are two types of files ***.csv*** and ***.txt*** both contains the same datasets.
_trian.txt file starts with two natural number on separated lines: ***F*** — number of features and ***N*** — number of objects in dataset. The ***N*** following lines contains description of objects (one object per line): ***F***+1 numbers. ***F*** features of current object and its target value +1 or -1. **_test.txt** file contains 1024 objects with the similar format (without two numbers at the begin of file).

Example



Linear Polynomial Gaussian